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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,401	12/13/2001	Paulus Cornelis Duineveld	NL 000697	3622

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EXAMINER

KRISHNAN, SUMATI

ART UNIT PAPER NUMBER

2875

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,401

Applicant(s)

DUINEVELD ET AL.

Examiner

Sumati Krishnan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 12-13 is/are rejected.
- 7) ☒ Claim(s) 5 and 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Drawings

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102 – Chen US 6008578

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (US 6008578).

Regarding claim 1, Chen discloses an organic EL color display panel comprising a plurality of pixels arranged in rows and columns to form a grid pattern, each pixel comprising at least two color sections, (Chen discloses 3- R,G,B) a first color section of which emits light of a first color, and a second color section emits light of a second color being different from the first color, characterized in that the positional arrangement of the first and second color sections

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within a first one of the pixels, is different from the positional arrangement of the first and second color sections within a second one of the pixels, wherein the first pixel is adjacent to the second pixel. See figure 6, which clearly depicts this positional difference between two pixels.

Regarding claim 2, Chen discloses that the first and second pixel are in the same column, see figure 6, wherein a pixel comprises the three color sections taken together in the horizontal direction.

Regarding claim 3, Chen discloses each color section adjacently arranged on parallel, laterally spaced apart slanting lines with respect to the column direction, see figure 6.

Regarding claim 6, Chen's phosphors are organic electro-luminescent.

Claim Rejections - 35 USC § 102 – Hong US 6278238

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Hong (US 6278238).

Regarding claims 1-3, Hong discloses all of the limitations of these claims, please see figure 7.

Regarding claim 4, Hong discloses the first color sections arranged on one slanting line, forming a continuous strip of electroluminescent material. See figure 7, for example color section "R" all arranged on one slanting line and forming a continuous strip of EL material.

Regarding claim 8, Hong discloses a color section comprising a layer of phosphor excited by a plasma discharge. See abstract.

Regarding claim 9, Hong discloses forming a plurality of parallel laterally spaced first electrode strips on a substrate (scan electrode 104), arranging a plurality of parallel laterally spaced EL strips emitting light of one of at least a first or a second color wherein strips of different colors are positioned side by side in a repeating pattern, (see figure 7), and forming a plurality of parallel laterally spaced second electrode strips (see data electrode 105) which second electrode strips cross the first electrode strips such that in operation an individual light emitting device is allocated at the crossing of a first and second electrode strip (see col. 2 lines 48-60). Hong discloses that the EL strips are arranged on a plurality of parallel laterally spaced slanting lines with respect to a grid formed by the first and second electrode strips, see figures 5 and 7.

Regarding claim 10, Hong discloses the second electrode strips crossing the first strips perpendicularly, (see column 2 lines 48-60) which yields a substantially rectangular grid formed by the first and second electrode strips, see figure 5.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (US 6008578).

Regarding claim 7, Chen discloses that an organic material has been used as a fluorescent member, (see column 3 line 14). Chen does not disclose what organic material. However, it is old and well known in the art for the organic electroluminescent material to be one of a multitude of polymers that are used in the manufacture of these layers. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a polymer as the organic electroluminescent material.

Regarding claim 13, it is notoriously old and well known in the art to provide an electronic device comprising an EL panel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the invention of Chen in an electronic device because this is one of the most common uses for such a display panel.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hong in view of Sreeram et al (US 6361390) further in view of Bouwkamp-Wijnoltaz et al (US 5965983).

Hong discloses the method as claimed in claim 9, but does not specifically disclose the use of ink jet printing in the deposition of the EL material. However, both Sreeram and

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Bouwkamp-Wijnoltaz disclose advantages of using ink jet printing over other traditional methods of deposition. Sreeram et al discloses that ink jet printing may provide better resolution than screen printing, see column 13 lines 20-30. Bouwkamp-Wijnoltaz et al discloses that ink jet printing is a rapid and flexible process which can be attributed to the fact that it can be controlled by the use of software. See column 1 lines 55-61. It would have been obvious to one of ordinary skill in the art to have used ink jet printing as the method of deposition of the EL material in the invention of Hong because this process is rapid and flexible, can be controlled by software and may provide better resolution than screen printing.

Allowable Subject Matter

Claims 5 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record neither shows nor suggests the angle of inclination of the barrier walls being equal to the relation provided in either of these claims.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumati Krishnan whose telephone number is 703-305-7906. The examiner can normally be reached on 8:00 am - 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 703-305-4939. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

SK


Thomas M. Sambin
Primary Examiner